

XXII. A LIST OF THE ORTHOPTERA COLLECTED IN
THE ISLE OF PINES BY J. L. GRAF, 1910, AND
G. A. LINK, 1912-1913.

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In the preparation of the following brief list, so far as the Achetidæ and subsequent families are concerned, we have mostly made a compilation of the names of those species, which have been listed by Dr. Lawrence Bruner in his various papers upon the neotropical Orthoptera, which have from time to time appeared in these ANNALS. The list does not by any means cover the field, as Mr. Link only now and then picked up such specimens as he encountered. A diligent and systematic search by an orthopterist no doubt would show that a number of species, which have been reported from Cuba, but which are not here mentioned, are inhabitants of the island.

BLATTOIDEA.

Family BLATTIDÆ.

Genus BLATTA Linnæus.

1. *Blatta delicatula* Guérin-Ménéville.

Blatta delicatula GUÉRIN-MÉNÉVILLE, in SAGRA'S Hist. Nat. de Cuba, VII, 1857.
p. 346.

A specimen taken by Link at Los Indios is referred to this species with a shadow of doubt. (*Det.* H. Kahl.)

Genus EURYCOTIS Stål.

2. *Eurycotis finschiana* (Saussure).

Platyzosteria finschiana SAUSSURE, Melanges Orthopt., II, Fasc. IV, 1872, p. 111.
Platyzosteria cabreræ BOLÍVAR, An. Soc. Esp. Hist. Nat., X, 1881, p. 355, Pl. VIII,
figs. 3, 3 a.

Two males and one female taken by Link at Los Indios, no date given. (*Det.* H. Kahl.)

Genus PERIPLANETA Burmeister.

3. *Periplaneta americana* (Linnæus).

Blatta americana LINNÆUS, Syst. Nat., Ed. X, I, 1758, p. 424.

A female from Los Indios, and another female from Nueva Gerona, the latter arriving at the Museum alive on July 25, 1912, and discovered when a box of bird-skins was being unpacked, thus illustrating the manner in which the insect has been transported from place to place in times past.

Genus LEUCOPHÆA Burmeister.

4. *Leucophæa surinamensis* (Linnæus).

Blatta surinamensis LINNÆUS, Syst. Nat., Ed. X, I, 1758, p. 424.

One specimen from Los Indios.

MANTOIDEA.

Family MANTIDÆ.

Genus GONATISTA Saussure.

5. *Gonatista grisea* (Fabricius).

Mantis grisea FABRICIUS, Ent. Syst., II, 1793, p. 22.

One male taken at Nueva Gerona, May 8, 1910.

Genus MUSONIA Stål.

6. *Musonia cubensis* (Saussure).

Thespis cubensis SAUSSURE, Mitth. Schweiz. Ent. Gesellsch., III, 1869, p. 70.

Three specimens, a male and two nymphs, were taken at Nueva Gerona by Graf, May 6, 1910; a male was taken at Los Indios by Link in September, 1912. (Det. H. Kahl.)

ACHETOIDEA.

Family NEMOBIIDÆ.

Genus NEMOBIUS Serville.

7. *Nemobius cubensis* Saussure.

Nemobius cubensis SAUSSURE, Miss. Mex., Orth., 8174, p. 384, Pl. VII, fig. 5.

One female taken at Los Indios.

Family ACHETIDÆ.

Genus GRYLUS Linnæus.

8. *Gryllus assimilis* Fabricius.*Gryllus assimilis* FABRICIUS, Syst. Ent., 1775, p. 280.

Nueva Gerona.

Genus GRYLLODES Saussure.

9. *Grylloides sigillatus* (Walker).*Gryllus sigillatus* WALKER, Cat. Derm. Salt. B. M., I, 1869, p. 46.

A few specimens.

Family PHALANGOPSITIDÆ.

Genus AMPHIACUSTA Saussure.

10. *Amphiacusta annulipes* (Serville).*Phalangopsis annulipes* SERVILLE, Ann. Sci. Nat., XXII, 1831, p. 167.

Three specimens from Los Indios (Link coll.).

TETTIGONOIDEA.

Family PHANOPTERIDÆ.

Genus MICROCENTRUM Scudder.

11. *Microcentrum marginellum* (Serville).*Phylloptera marginella* SERVILLE, Ins. Orthop., 1839, p. 405.

One female, Nueva Gerona, August 26, 1912.

Genus DIPLOPHYLLUS Saussure.

12. *Diplophyllus insularis* Bruner.*Diplophyllus insularis* BRUNER, Ann. Carn. Museum, IX, 1915, p. 331.

The type, which is unique, was taken by Link in the month of June.

Family CONOCEPHALIDÆ.

Genus CONOCEPHALUS Thunberg.

13. *Conocephalus fasciatus* (DeGeer).*Locusta fasciata* DEGEER, Mémoir Ins., III., 1773, p. 458, Pl. XL, fig. 4.

Fourteen specimens taken at various localities during the months of July and August.

Family COPIOPHORIDÆ.

Genus NEOCONOCEPHALUS Karny.

14. *Neoconocephalus nigropunctatus* (Redtenbacher).

Conocephalus nigropunctatus REDTENBACHER, Verh. Zoöl.-Bot. Ges. Wien, XLI, 1891, pp. 380, 391, Pl. III, fig. 32. .

One male taken at Nueva Gerona in March.

15. *Neoconocephalus maxillosus* (Fabricius).

Locusta maxillosa FABRICIUS, Syst. Ent., 1775, p. 284.

A single male captured at Nueva Gerona in July.

16. *Neoconocephalus muticus* (Redtenbacher).

Conocephalus muticus REDTENBACHER, l. c., p. 393.

Mr. Link captured a female of this species at Nueva Gerona in July.

ACRIDOIDEA.

Family TRUXALIDÆ.

Genus ORPHULELLA Giglio-Tos.

17. *Orphulella scudderi* (Bolívar).

Orphula scudderi BOLÍVAR, Mém. Soc. Zoöl. France, I, 1888, p. 142.

Recorded from the Isle of Pines by Bruner (*cf.* ANN. CARN. MUSEUM, VIII, p. 17).

Family ÆDIPODIDÆ (LOCUSTIDÆ).

Genus PSINIDIA Stål.

18. *Psinidia fenestralis* (Serville).

Ædipoda fenestralis SERVILLE, Ins. Orthop., 1838, p. 726.

A very long series taken by Link at Nueva Gerona from the beginning of June to the end of August.

Genus SPHINGONOTUS Fabricius.

19. *Sphingonotus haitensis* (Saussure).

Ædipoda haitensis SAUSSURE, Rev. Zoöl. (2), XIII, 1861, p. 323.

One specimen taken at Nueva Gerona by Graf, May 5, 1910.

Family CYRTACANTHACRIDÆ.

Genus SCHISTOCERCA Stål.

20. *Schistocerca pallens* (Thunberg).

Gryllus pallens THUNBERG, Mém. Acad. Petersb., V, 1815, p. 237.

A very long series taken at Nueva Gerona in June and July.

21. *Schistocerca inscripta* (Walker).

Cyrtacanthacris inscripta WALKER, Cat. Derm. Salt. B. M., III, 1870, p. 550.

Apparently very common. A long series taken by Link at Nueva Gerona in the months of June, July, and August.